

DEL-CHEM

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Bulletin



ChemVets Lecture The Future of ACS & The Chemistry Professions

Thomas Connelly, Jr., Ph.D.
Executive Director and
Chief Executive ACS

*DuPont Country Club
February 13, 2017, 6 - 9 pm*

FEBRUARY SECTION NETWORKING HAPPY HOUR

February 15, 2017

5:30 - 7:30 pm

BBC Grill and Tavern



For information on section activities visit our web site at:
www.delawareacs.org



Call for Nominations for Section Officers and Councilors

The Delaware Section of the American Chemical society is looking for candidates for local section officers to run in the May 2017 elections. The terms would begin January 2018. If you or someone you know is interested in running for the following positions, please contact Peiwen Zheng at 302-695-2964 or by email at peiwen.zheng@dupont.com. The deadline for submission of materials is March 1, 2017. The positions that are open include:

Chair Elect.....	1 year term
Secretary.....	1 year term
Director.....	3 year term
Treasurer.....	2 year term

Job descriptions can be found at:

<http://www.delawareacs.org/documents>

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CHAIR’S COLUMN

By the time, this bulletin is in print, our country has a new government in place. Couple that with the rapid changes many local companies are undertaking, we have an elixir of uncertainty in our profession. In times like these, we are impacted by these changes. However, let us not forget this quote from Linus Pauling: “Every aspect of the world today—even politics and international relations—is affected by chemistry.” I believe his statement still holds true today. Thus, as practitioners of this central science, we have a tremendous opportunity to affect the changes that we see around us.

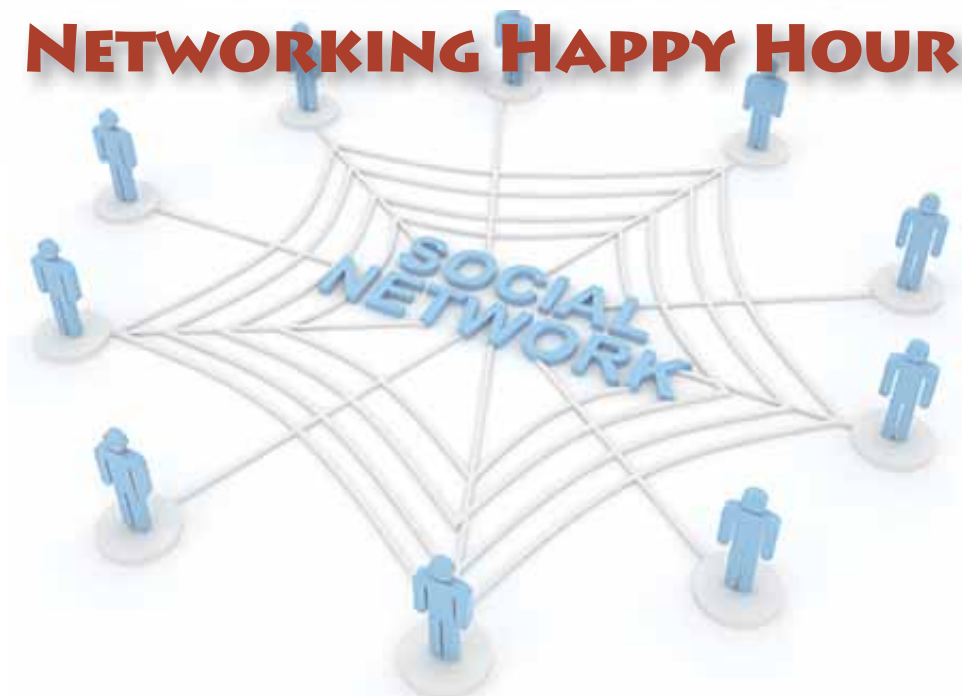
On a personal level, I love what I do at DuPont. To learn, to immerse in discovery, to bounce ideas with other colleagues is quite fun. I look forward to it every morning of the weekday. It would not be the same if there are not many colleagues around. Amidst uncertainty, a company of colleagues to support one another and have fun together is vital. ***Thus, I invite you to the happy hour on Wednesday February 15th 5:30-7:30pm.*** Two days before that, we get to hear from one of our ACS leaders, Dr. Tom Connelly, CEO and Chair of ACS at the DuPont Country Club starting at 6:30-9:00. There will be plenty of snacks and a cash bar. Both events are free of charge. Please come with your ideas,

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Disclaimer: The views and opinions expressed in the columns are those of the contributors and do not necessarily reflect those of the Delaware Local Section.

DELAWARE ACS

NETWORKING HAPPY HOUR



1. Provide input to the executive committee on future events
2. Network with fellow members

Date: Wednesday, February 15, 2017

Time: 5:30 - 7:30 pm

Location: BBC Grill and Tavern, 4019 Kennett
Pike Greenville, DE 19807

Cost: FREE (registration required)
Food will be provided.

Soft drinks and alcoholic beverages will be available for cash or charge at the bar.

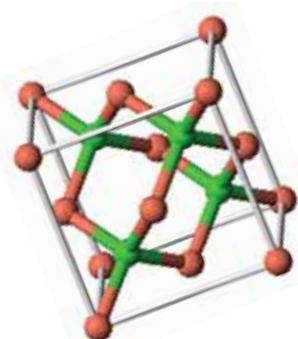
Please register so that we can have enough food.

Registration:

1. Use the link provided on the section website, <http://delacs.sites.org>, or in the Del-Chem Bulletin distribution announcement to register online.
2. E-mail delawareacs@gmail.com to receive a link to online registration

Members who are unable to register online should call
Giang Vo at 302-695-7318.

Joseph Priestley Society: Ray Miller



Growing Sustainably: Lessons Learned in Developing and Launching New Businesses in the Chemical Industry

Date: February 09, 2017

Time: 11:30 a.m. to 2:00 p.m.

Location: Chemical Heritage Foundation
315 Chestnut Street, Philadelphia, PA 19106

Event Type: Open to the Public

Fee: \$25

RSVP Online: Registration Required

<https://www.eventbrite.com/e/joseph-priestley-society-ray-miller-tickets-28924446799>

The Joseph Priestley Society (JPS) lecture series explores topics in science, technology, and industry through professional networking receptions and lectures by industry leaders.

For more information about this event, please contact Sarah Reisert at 215.873.8263 or sreisert@chemheritage.org.

Event Schedule:

- 11:30 a.m.
Networking Reception
- 12:15 p.m.
Luncheon
- 1:00 p.m.
Keynote Address

ChemVets Lecture The Future of ACS & the Chemistry Professions

*Thomas Connelly, Jr., Ph.D., Executive
Director and Chief Executive Officer, ACS*

- Date:** February 13, 2017
Time: 6:30 p.m. –9:00 p.m.
Location: The DuPont Country Club
6:30 Networking
7:30 Lecture
Event Type: Open to the Public
Fee: None
Registration: Required

Biography:

“Thomas M. Connelly, Jr. is the Executive Director and CEO of the American Chemical Society. Dr. Connelly retired from DuPont in December 2014, where he was Executive Vice President, Chief Innovation Officer. At DuPont, Dr. Connelly led businesses and R&D organizations, while based in the U.S., Europe, and Asia.

Dr. Connelly graduated with highest honors from Princeton University with degrees in Chemical Engineering and Economics. As a Winston Churchill Scholar, he received his doctorate in chemical engineering from the University of Cambridge. He has served in advisory roles to the U.S. Government and the Republic of Singapore.”

For more information about this event, please contact Bruce Frye, ChemVets Chair, at bfrye6@yahoo.com



Brown Bag Lecture

What Clean Smells Like: Commercial Chemists and the Politics of Women's Work in the Mid-Century United States

Spring Greeney

Date: February 13, 2017

Time: 12:00 p.m.-1:00 p.m.

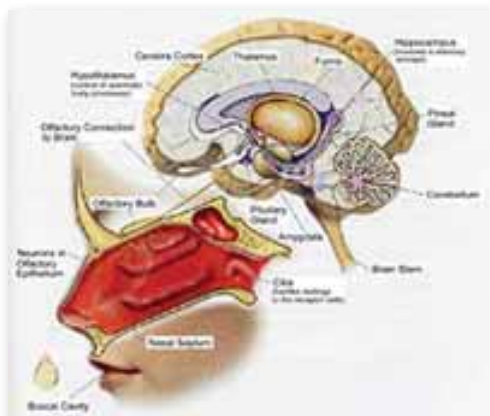
Location: Chemical Heritage Foundation
315 Chestnut Street Philadelphia, PA 19106

Event Type: Open to the Public

Join the CHF for a Brown Bag Lecture with Spring Greeney, one of CHF's 2016–2017 Short-Term Fellows.

What should a clean shirt smell like? Commercial detergent manufacturers in the 1950s United States offered an array of branded suggestions: Oxygel, Ivory Snow, Lux, Chipso, and Selox crowded grocery-store shelves and the pages of magazines like *Redbook*. This vision of standardized and synthesized clean laundry represented a sea change in consumer expectations from just three decades earlier. Recalled homemaker Viola Smith, of her 1920s childhood doing laundry in rural Kentucky, “We’d get sassafras bark, scrape it and put it in some [washtub] and some we’d get birch to make it smell good.” Cleanliness for Smith smelled of the Appalachian foothills where she lived and required a day’s worth of labor each week—a stark difference from what detergent manufacturers would sell just three decades later. How and why did these changes come to pass? What role did commercial chemists and washerwomen themselves play in redefining cleanliness? Refuting the notion that washing laundry has ever just been “women’s work,” this presentation tells the surprising story of the men and women who remade the work of washing laundry in the 20th-century United States—a process that also reimagined the meaning of “women’s work” and remade our interactions with the natural world always present in our homes.

Spring Greeney is a doctoral candidate in the history department at the University of Wisconsin–Madison. Her dissertation, an environmental history of doing the wash, examines how laundry workers and commercial chemists remade the smell of cleanliness over the past 150 years of U.S. history, a process transforming the types of nature that laundry’s doers—unpaid women, paid piecemeal laundresses, steam laundry employees, dry cleaners—have encountered in our ostensibly domesticated spaces.



Brown Bag Lecture

A Better Mousetrap for Your Armpit: Deodorant and Technological Innovation

Cari Casteel

Date: February 20, 2017

Time: 12:00 p.m.-1:00 p.m.

Location: Chemical Heritage Foundation
315 Chestnut Street Philadelphia, PA 19106

Event Type: Open to the Public

Join the CHF for a Brown Bag Lecture with Cari Casteel, CHF's 2016–2017 Price Fellow.

As of 2016 over 97% of men and women in the United States apply a deodorant or an antiperspirant every day—and some more often than that. The store shelves are filled with a dizzying array of applications and scents. Before the 1950s deodorants only came in two forms—liquid and cream. By the 1960s the choices seemed endless.

In the years following World War II the deodorant market underwent a period of rapid technological innovation. With the market at near saturation technology and innovation had become the way to win consumers. New application methods including roll-ons, sprays, and sticks filled the shelves. These new deodorants drove many consumers to frequently switch brands, opting for the newest, most modern product. This made it possible for an innovative deodorant to go from nonexistent to the market leader in a matter of months. Deodorant makers found themselves locked in a constant struggle to—in the words of an English Leather deodorant ad—“build a better mousetrap” for the armpit.

Cari Casteel is a PhD candidate at Auburn University studying the history of technology. Cari is interested in the intersection of gender, science, and technology. Her dissertation focuses on deodorant and the role of artificial body smell in the construction of gender. It examines the history and technological evolution of deodorants and antiperspirants in the United States and explores the hypergendered nature of scented cosmetics. Her research has been featured in Smithsonian Magazine as well as Allure, Men's Health, and Girl's Life.



Reflections on Science and Jewish Tradition

Speaker: *Roald Hoffmann*

Date: **Sunday, February 26, 2017**

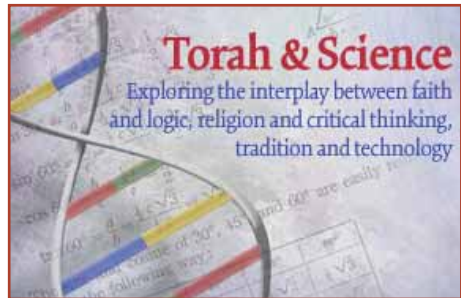
Time: 7:00 – 8:30 p.m.

Location: Adas Kodesch Shel Emeth Synagogue (AKSE)
4412 Washington Blvd.
Wilmington, DE 19802

Event type: Open to the public

Cost: Free. Refreshments provided.

Registration: Not required



More information:

Contact Mark Wagman at 302.475.8351 or mewag1@comcast.net.

Abstract:

“That science and religion only contend, or that they occupy separate compartments in our minds, one unrelated to the other—these are both such impoverishing views. Scientific knowledge, aesthetics, and faith cohabit. They speak to one another in the human soul—yes, sometimes their dialogue is uneasy. But it is their intertwined voices which shape true human understanding.” In their book, *Old Wine, New Flasks: Reflections on Science and Jewish Tradition*, Roald Hoffmann and Shira Leibowitz Schmidt further represent “true human understanding” as a jigsaw puzzle, with the pieces widely dispersed, and they proceed to assemble jigsaw pieces—some from science and some from religion.

In his lecture Hoffmann explores this metaphor. “The religious setting is that of Jewish tradition. The science is mainly the central one, chemistry. Some stories will be told, digressive the way real life is, of how science, religion and art look at pieces of the world. One such story will feature an ancient pigment, Tyrian purple, which also played a ritual role in Jewish religious practice. And in an American contribution to world culture, blue jeans.”

Hoffmann’s lecture is the kickoff event of a project at AKSE that seeks to engage science with Jewish tradition to illuminate the theme of Natural and Man-made.

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The theme itself was inspired by some of his writing, and part of his lecture will introduce the theme. In three subsequent events, on April 2, April 23 and May 7, the perspectives of science and Judaism will be developed and brought to bear on intriguing questions such as “Are humans a part of nature, or apart from nature?”, “How and why do we distinguish between the natural and

the man-made?” and “Is natural ‘better’?” The project is supported by a grant from Scientists in Synagogues, a project of Sinai and Synapses, and funded by the John Templeton Foundation.

Biography:

Born in 1937 in Zloczow, Poland (now Ukraine), Roald Hoffmann writes that he “came to a happy Jewish family in dark days in Europe.” Most of his family, including his father, were killed by the Nazis and their helpers. He survived along with his mother and a handful of relatives and, in 1949, came to the United States. Since 1965 Hoffmann has been at Cornell University, where he is now the Frank H. T. Rhodes Professor of Humane Letters Emeritus. A self-described “applied theoretical chemist,” he has received virtually all the honors of his profession, including the Nobel Prize in chemistry in 1981, shared with Kenichi Fukui for the independent work of each on theories of the conservation of orbital symmetry in chemical reactions. Yet he is equally comfortable working across disciplines in a “land between science, poetry and philosophy.” Hoffmann is notable also for reaching out to the general public. He has published several poetry collections and plays. His book *Chemistry Imagined* explores the creative and humanistic aspects of chemistry. He presented *The World of Chemistry* series on PBS and runs a monthly cabaret, *Entertaining Science*, in Greenwich Village

Brown Bag Lecture

Rethinking Industrial Patronage of Academic Research in the Early Cold War

Joe Martin

Date: February 27, 2017

Time: 12:00 p.m.-1:00 p.m.

Location: Chemical Heritage Foundation
315 Chestnut Street Philadelphia, PA 19106

Event Type: Open to the Public

Join CHF for a Brown Bag Lecture with Joe Martin from the Consortium for History of Science, Technology, and Medicine.

Robert Maynard Hutchins, erstwhile president and chancellor of the University of Chicago, recalled in 1963, “My view, based on long and painful observation, is that professors are somewhat worse than other people, and that scientists are somewhat worse than other professors.” This outlook was part of a cohesive moral philosophy of education that motivated his efforts to keep University of Chicago scientists insulated from outside—especially military—influence after World War II. Perhaps unexpectedly, his science faculty embraced his plan to fund a series of new, ambitious research institutes with numerous small subscriptions from industry, seeing in it a way to protect their commitment to basic research. In the same era University of Michigan deployed a similar strategy to attract industry funding. Michigan developed its industrial partnerships in the context of a laboratory that doubled as a living war memorial, enlisting businesses by appealing to their sense of corporate responsibility and suggesting a shared obligation to prevent a government monopoly on basic research.

Historians have shown how some university-industry collaborations supported American military interests during the Cold War. They have demonstrated, for instance, that institutions such as the Massachusetts Institute of Technology and Stanford University cultivated a cozy relationship with both industry and government after World War II, at times steering their research toward economic and military interests. Studies of this type of relationship have shaped current historical understanding of Cold War science, and they suggest that individual institutions possessed very little latitude to craft the types of relationships with industry they thought most conducive to their institutional goals. A broader survey of institutions will situate existing understanding of academia-industry partnerships within a larger, knottier story about American science, technology, academia, and industry. This talk presents case studies of the University of Chicago and the University of Michigan and describes how they motivate a more systematic rethinking of the role of industrial patronage in reshaping Cold War science.

Joseph D. Martin is a National Science Foundation Research Scholar and Fellow-in-Residence at the Consortium for History of Science, Technology, and Medicine. He also holds a visiting research fellowship at the Centre for History and Philosophy of Science, University of Leeds. He completed a PhD in History of Science, Technology, and Medicine at the University of Minnesota and has taught at Colby College and Michigan State University. His research addresses the history of the physical sciences, especially solid state and condensed matter physics, and scientific and technical institutions in Cold War America.



Frigid February

Al Denio

The Merger –

I hear that progress is being made but the timetable is questionable. Rumors abound. The future of the Stine-Haskell site is indefinite but it might be sold to U.D. The Experimental Station and Chestnut Run locations sound secure. Who knows about the historic Dupont Building? If Chemours relocates, that will not help. The Dupont Country Club is still for sale and Trump likes golf courses. It appears that 2017 will be quite “interesting.”

The Trump Administration –

I am writing this in mid-December to meet the January 1 deadline. I may not be entirely sober on that date. I was passed over for the job as Secretary of Education. That went to a rich Michigan lady who does not believe in public education. The job of Science Advisor is still open but I do not expect an offer. Maybe I should nominate “Magic” Mike Stemniski or John Gavenonis, both GOP members. I hope to see a chemist or chem engineer in the Cabinet by January 20th.

Holiday Chemicals –

Five compounds will see extensive use over the holidays. My favorites are sucrose, caffeine, aqueous solutions of ethanol and aspirin.

One must avoid dehydration in cold weather. In Wisconsin this leads to lots of beer consumption. Recall that this beverage is about 95% water and 5% ethanol. This second ingredient is known to kill any bacteria hiding out in your internal plumbing. Trust me, I survived 34 winters in the Land of Absolute Zero!

Asbestos –

The November 28 issue of C&E News had an interesting article on this hazardous mineral, written by Britt E. Erickson. Labs with high vacuum systems used asbestos to insulate and protect glass containing hot mercury. Even general chem labs used wire gauze pads with asbestos heat shields.

“More than 50 countries around the world have banned the use of asbestos, a known human carcinogen linked to lung cancer, mesothelioma, and other diseases.” EPA banned most uses in 1989 but a federal appeals court overturned the ban. A future ban in this country will probably go nowhere over the next four years.

February 13th –

I hope to see you at this Section meeting.

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questions and enjoy a good time with fellow professionals. Also, please encourage your friends and colleagues to come out.

While uncertainty is real, we can always remember that only chemists can see things uniquely according to this corny joke:

“The optimist sees the glass half-full. The pessimist see the glass half-empty. The chemist sees the glass completely full, half with liquid and half with air.”

Best Regards,

Giang

P.S. Again, your voice is paramount to the Section. Please feel free provide feedback to any of the executive committee members throughout the year by phone or email. We want to hear from you. You can find our contact information in any of this year's Del Chem bulletin or online at <http://www.delawareacs.org/>. Thank you for your faithful support and readership.



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CALENDAR OF EVENTS

February

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